Application No.: 10/542,054

IN THE ABSTRACT

Please delete the current Abstract and substitute therefore the following Abstract:

ABSTRACT

A wheel speed detection system including a rotator, a sensor head, a detector, a pulse converter, a speed calculator and a threshold shifter. Plural concave and convex portions are formed on a periphery of the rotator rotating together with a wheel. The sensor head includes a coil to generate an alternate current magnetic field. The detector excites the coil to generate an eddy current on the concave and convex portions, and outputs alternate current detection signals corresponding to changes in the eddy current generated with rotation of the rotator. The pulse converter converts the alternate current detection signals into pulse signals according to preset threshold levels. The speed calculator calculates rotational speed of the wheel based on the pulse signals. The threshold shifter shifts the threshold levels corresponding to a difference between a default average and an average of the alternate current detection signals actually outputted from the detector.